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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/960,351
Filing Date: September 24, 2001
Appellant(s): LINDBERG, ANDERS

PENNY L. CAUDLE
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/10/09 appealing from the Office action mailed 07/24/09.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1A. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Jensen et al (5,671,219)**.

As to claim 1, **Jensen** a method in which user stations (102) communicate with one or more base stations (104) to place and receive calls and data, in a secure voice or data link and ability to handoff calls between stations while such calls are in progress and further discloses a method of test receiving alternative reception frequencies in a receiver receiving a continuous flow of information at a first reception frequency, the continuous flow of information including a user terminating information transmitted in clusters, the receiver including an information transfer routine that extracts a flow of specific user terminating information from the received continuous flow of information, the method comprising:

The claimed "an antenna and a demodulator…" are inherent to Receiver of Mobile Station 'MS'102 (figs.1-4 and col.3, lines 31-42, col.6, lines 11-55);

Predicting (MS-102) an interruption in the form of natural break in the transmitted flow of specific user terminating information, based on an indication of the end of a cluster of the specific user termination information, where the indication of the end of the cluster of specific user terminating information is part of the specific user terminating information (col.12, line 39-col.13, line 22, line 67-col.14, line 6); base on the behavior of the specific user terminating information, evaluating the interruption to determines a probability whether it will be of an adequate length of time, and generating a positive

response if it is evaluated that the interruption will be of an adequate length of time (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43);

Changing reception frequency of the receiver from the first reception frequency to an alternative reception frequency if the evaluation has generate a positive response; Test receiving the alternative reception frequency; enabling reception and extraction of the flow of specific user terminating information (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43), note that due to expected interruption of the flow of information to MS-102 during communication with a base station, MS-102 stores in advance available frequencies of all base stations within the vicinity, and when such interruption occurs during communication, such as, faulty communication, in situation where sudden shadowing occurs, such as when connection with current base station is lost due to severe signal blockage near the limit of cell range such as can occur when turning corner quickly in a dense urban high rise area, low signal strength, etc., MS-102 checks its previously created 'priority list' of available base stations in the vicinity and attempts to establish contact with new base station (handoff or handover) or previous base station during this period. Jensen further teaches monitoring packets of information being received, within a set interval, and if the overall link quality drops below a measurement threshold, the receiver switches to one of previously stored frequencies (col.15, lines 13-25, line 47-col.16, line 18, col.17, line 37-col.18, 43 and col.19, line 55-col.20, line 1+). By monitoring packets of information within a set interval, Jensen meets the limitation of a cluster of specific user terminating information as to where the packet of the flow of specific user terminating information is based.

Jensen is silent where the flow of information of a unidirectional digital broadcasting transmission.

However, Jensen further suggests that the invention can be implemented on cable TV network and variety of different networks, including broadcast networks or point-multipoint applications depending upon the desired application (col.4, line 43-col.5, line 6, col.8, lines 46-61 and col.14, lines 30-52).

Hence it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Jensen to include broadcast networks or point-to-multipoint applications, such as DVB, DAB, etc. to provide additional service(s) to users.

Claims 2-3 are met as previously discussed with respect to claim 1.

As to claims 4-5, Jensen further discloses where the interruption comprises the steps of: determining a probability that the interruption will be of an adequate length of time, determining if the probability is larger than a predetermined threshold value and if is determined that the probability is larger than the predetermined threshold value then it is evaluated that the interruption will be of an adequate length of time, where an adequate length of time of an interruption is at least equal to a total time of one test reception and one frequency (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43), note that the probability of having a loss of signal was anticipated thereby leading to the creation of a priority list, for providing a solution in the event of a signal loss. Furthermore, the probability of having a signal loss is based on a predetermined threshold of amount of signal within a period.

Claims 6-9 are met as previously discussed with respect to claim 1.

Claim 10 is met as previously discussed with respect to claim 1.

Claim 11 is met as previously discussed with respect to claim 1.

Claim 12 is met as previously discussed with respect to claim 1.

As to claims 13-14, Jensen further discloses where enabling reception and extraction of the flow of specific user terminating information (SUTI) is performed after a predetermined time after the information transfer routine has requested more information (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43).

As to claims 15-16, Jensen further discloses where enabling reception and extraction of the flow of SUTI is performed after the information transfer routine is activated and after a predetermined period of time (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43).

As to claims 17-23, Jensen further discloses determining a list of alternative frequencies, the claimed “changing reception frequency….” “test receiving the further alternative frequency (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43), evaluating the test reception or test receptions based on one or more parameters of the test received alternative frequency or frequencies, where enabling reception and extraction of the flow of USTI comprises changing the reception frequency to the first reception frequency and initiating a handover to an alternative frequency (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43).

As to claims 24-29, the claimed limitations are met as previously discussed with respect to claim 1.

As to claim 30, the claimed "a receiver being arranged to receiving a continuous flow of information…" is composed of the same structural elements that were discussed in the rejection of claim 1.

Claims 31-32 are met as previously discussed with respect to claims 2-3.

As to claims 33, Jensen further discloses continuously evaluating and determining the best frequency within a predetermined time during the handoff (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43).

Claims 34-37 are met as previously discussed with respect to claims 17-23.

(10) Response to Argument

The Examiner respectfully disagrees that the rejection should be reversed.

Appellant discusses the prior art of record Jensen et al (5,671,219) and the claimed invention and further argues that "The Examiner fails to establish a prima facie case of obviousness because the cited prior art fails to teach or suggest each and every element recited in claims 1-37" that "…Jensen fails to disclose or suggest (1) predicting an interruption in the form of a natural break in the transmitted flow of specific user terminating information…(2) evaluating the interruption to determine whether it will be of adequate length of time...." etc. (see page 4+ of Appellant's Brief).

In response, Examiner notes Appellant's arguments, however, the Examiner disagrees. Appellant's traversal of the 103(a) rejection using Jensen, stem primarily from Appellant's mischaracterization of the Jensen reference. Jensen clearly discloses a Receiver, which monitors **packets of information within a transmission channel** or frequency and retrieves portions of data within the channel being received or other

available channels (channels stored in advance) during interruption or breaks. Jensen further discloses switching to channel(s) **during hand-off (interruption of break)** to retrieve data seamlessly (col.12, line 39-col.13, line 22, line 67-col.14, line 6, line 54-col.15, line 38, line 47-col.16, line 18, col.17, line 37-col.18, 43 and col.19, line 55-col.20, line 1+). Jensen further discloses switching to channel(s) seamlessly to retrieve continuous flow of data, during other **forms of interruption(s) or break(s) (natural interruption(s) or natural break(s)) in the flow of data due to such as: low signal quality, severe signal blockage when turning corner quickly or dense urban high rise, etc.,…as a result of poor data flow, error in the data, etc.)** (col.18, lines 43), of the current channel in-progress. Jensen further teaches other seamless undetectable handoffs between stations (col.12, line 39-col.13, line 22, line 67-col.14, line 6, line 54-col.15, line 38, line 47-col.16, line 18, col.17, line 37-col.18, 43 and col.19, line 55-col.20, line 1+); Jensen clearly discloses **monitoring packets of information (cluster) being received within a set interval or period, and switching to one of previously stored channels, if the overall link quality drops below a measurement threshold, which meets the limitation of** "…a cluster of specific user terminating information…indication of the end of he cluster....of specific user terminating information." and further discloses that **the invention could be implemented on a one way broadcast system or point-to-multipoint application** (col.8, lines 53-60). Furthermore, from the disclosure in Jensen, the probability of having a loss of signal **(continuous flow of data within channel or frequency being received) was anticipated thereby leading to the creation of a priority list**, for providing a solution

in the event of a signal loss. In addition, the probability of having a signal loss is based on a predetermined threshold of amount of signal within a period. Jensen does not clearly show where the flow of information is a unidirectional digital broadcasting transmission. However, Jensen further suggests that the invention can be implemented on cable TV network and variety of different networks, including broadcast networks or point-multipoint applications depending upon the desired application (col.4, line 43-col.5, line 6, col.8, lines 46-61 and col.14, lines 30-52). Hence it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Jensen to include other broadcast networks or point-to-multipoint applications, such as DVB, DAB, etc., to provide additional service(s) to users.

As to Appellant's arguments that, "…the Examiner fails to establish a prima facie case of obviousness....," Examiner disagrees. As discussed above, Jensen meets all the claims limitations. Clearly, Jensen discloses all the claims limitations, but does not clearly discussed where the system is a unidirectional digital broadcasting transmission. However, Jensen further suggests that the invention can be implemented on cable TV network and variety of different networks, including broadcast networks or point-multipoint applications depending upon the desired application. In any event, the Appellant is reminded that a reference can be relied upon for all that would have been reasonably suggested to one of ordinary skill in the art, including non-preferred/preferred embodiments, see MPEP 2123. Hence, while Jensen teaches preferred or alternate embodiments, Jensen system teaches all the steps of monitoring **packets of information within a transmission channel** or frequency and retrieving

portions of data, within the channel being received or other available channels (channels stored in advance), for presentation, accounting for natural **interruption due to various natural breaks**, e.g., **low signal quality, severe signal blockage when turning corner quickly or dense urban high rise, etc.,…as a result of poor data flow, error in the data, etc.),** controls the transmitted data received and provides seamless data service to user(s) during the interruption(s) or break(s). **Jensen further discloses one way broadcast system or point-to-multipoint application (col.8, lines 53-60).** Jensen further teaches other seamless undetectable handoffs between stations, **monitors packets of information (cluster) being received within a set interval or period; and switches to one of previously stored channels seamlessly, if the overall link quality drops below a measurement threshold.** As clearly shown, Jensen discloses various embodiments and suggests other systems were the invention may be implemented. Hence, a prima facie case of obviousness is made because all the elements are known (as shown in the prior art), and could be combined by known methods and would result in a predicted results of monitoring a unidirectional broadcast system to retrieve continuous flow data accordingly, for presentation to the user(s). Hence the 103(a) rejection is deemed proper, meets all the claims limitations and should be sustained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Annan Q Shang/

Primary Examiner, Art Unit 2424

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